CAROL ANN HOFFMAN

IBLA 85-609 Decided December 2, 1987

Appeal from a decision of the Eastern States Office, Bureau of Land Management, rejecting simultaneous oil and gas lease application ES 31984.
Affirmed.

1. Oil and Gas Leases: Acquired Lands Leases -- Oil and Gas Leases: Known Geologic Structure

BLM may properly designate lands as within a known geologic structure (KGS) of a producing oil or gas field even though such lands are not underlain by a dome or anticline. Lands underlain by stratigraphic traps of oil or gas may properly be designated as KGS lands, and such lands may be leased only by competitive bidding.

APPEARANCES: Carol Ann Hoffman, Denver, Colorado, pro se; Kenneth G. Lee, Esq., Office of the Solicitor, Alexandria, Virginia, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE ARNESS

Carol Ann Hoffman has appealed from a decision of the Eastern States Office, Bureau of Land Management (BLM), dated August 9, 1985, rejecting her oil and gas application 1/ to lease acquired lands in Claiborne Parish, Louisiana. BLM issued its decision because the lands described by appellant's offer (ES 31984) were within a known geologic structure (KGS) and, as such, were leasable only by competitive bidding. 2/

Appellant's offer to lease was filed with BLM in January 1983 pursuant to section 3 of the Act of August 7, 1947, commonly known as the Mineral Leasing Act for Acquired Lands, 30 U.S.C. § 352 (1982). By memorandum dated January 10, 1985, the District Manager, Southeast Division, informed the State Director that "based on current activity and geologic data" the Colquitt, Bayou Middle Fork, and Northwest Antioch KGS's had been merged effective January 8, 1985. Lands described by appellant's offer were found to be within this merged KGS.

1/ Technically, BLM was rejecting Hoffman's offer, not her application, to lease for oil and gas.
2/ Appellant submitted a noncompetitive offer to lease. Her application for parcel ES-135 was selected with first priorty in BLM's September 1982 drawing of simultaneously filed applications.

In her statement of reasons, appellant includes a geologic report by Thomas C. Buchanan describing the lands at issue. Buchanan states that "[i]n the immediate area there are no known geologic structures in the conventional sense" (Report at 5). Appellant acknowledges that oil is found in the area in small stratigraphic traps, 3/ but questions how BLM's merged KGS can be one stratigraphic trap or KGS.

Appellant further argues that BLM has merged the Colquitt, Bayou Middle Fork, and Northwest Antioch fields into one large KGS, including intervening acreage, without regard to dry holes. Dry holes occur on lands 4/ that intervene between ES 31984 and the Colquitt and Northwest Antioch fields as originally drawn, appellant claims.

Hoffman's third argument on appeal focuses on Arkla Exploration Co. v. Watt, 562 F. Supp. 1214 (D.W.D. Ark. 1983), aff'd, Arkla Exploration Co. v. Texas Oil & Gas Corp., 734 F.2d 347 (8th Cir. 1984). Appellant argues that BLM's decision should be reversed because BLM relied on a definition of "KGS" that the Arkla courts found to be inconsistent with the intent of Congress to equate a KGS with a dome or anticline. No domes or anticlines exist on the lands at issue, appellant reiterates.

Last, Hoffman states that she feels defrauded by the Department's refusal to issue a lease after accepting her filing fee and holding the first year's rental for over 2-1/2 years. Any changes made by the Department in its KGS rules should not be made retroactive to leases won years before the change, appellant maintains, nor should the mere presence of competitive interest in a tract cause the tract to be classified KGS.

Section 3 of the Mineral Leasing Act for Acquired Lands, 30 U.S.C. § 352 (1982), authorizes the Secretary to lease deposits of oil and gas acquired by the United States and which are within lands acquired by the United States under the same conditions as contained in the leasing provisions of the mineral leasing laws, subject to the provisions of the Act. Section 17(b) of the Mineral Leasing Act, as amended, 30 U.S.C. § 226(b) (1982), provides that public domain lands within the "known geological structure of a producing oil and gas field * * * shall be leased to the highest responsible qualified bidder by competitive bidding." A KGS, as defined by Departmental regulation, is "technically the trap in which an accumulation of oil or gas has been discovered by drilling and determined to be productive, the limits of which include all acreage that is presumptively productive." 43 CFR 3100.0-5(1). The Secretary of the Interior is authorized to fix and determine the boundary lines of any structure or oil or gas field. 30 U.S.C. § 189 (1982).

3/ "'Stratigraphic trap' is a general term for traps that are chiefly the result of a lateral variation in the lithology of the reservoir rock, or a break in its continuity." Levorsen, Geology of Petroleum 286 (1967).

4/ Appellant lists dry holes in secs. 2, 5, 8, 9, 10, 13, 16, 19, 20, 23, 24, 25, 27, 29, and 34, T. 22 N., R. 6 W., Louisiana Meridian, and states that some of those wells intervene between ES 31984 and the Colquitt and Northwest Antioch fields as originally drawn.

The record reveals, and appellant acknowledges, that the Northwest Antioch and Bayou Middle Fork fields are a "series of small stratigraphic traps that show closure on East-West trending faults." 5/ The Colquitt field has produced from the Smackover formation, which is located on a faulted anticline. 6/ BLM's mineral report, dated January 10, 1985, states that these fields were merged on the basis of numerous shows of oil and/or gas from wells in T. 22 N., Rs. 5-6 W., Louisiana Meridian, and on the basis of a structure map showing Federal mineral interests located in a productive fault block of the Smackover graben system. Federal mineral interests are located approximately one mile or less from oil and gas production or shows and are classified as presumptively productive. Id. at 2.

Appellant's first argument is answered by prior case law establishing that land underlain by stratigraphic traps is properly included within a single KGS. Karl Bruesselbach, A-28061 (Oct. 26, 1959). Thus, in Thunderbird Oil Corp., 91 IBLA 195 (1986), the Board held that the delineation of a KGS recognized the existence of a continuous entrapping structure, on some part of which there is production, or of numerous related but nevertheless independent stratigraphic traps. On judicial review of this decision, Thunderbird's successor argued that the contested area could not be a KGS because it was not a structural trap of oil or gas. The District Court rejected this argument, however, and affirmed the Board's decision, noting that the Secretary was "afforded a significant amount of discretion in determining where a KGS is located." Planet Corp. v. Hodel, No. 86-679 HB (D.N.M. May 6, 1987), quoting from Angelina Holly Corp. v. Clark, 587 F. Supp. 1152 (D.D.C. 1984). Although in this case BLM has identified a single KGS, no suggestion is made in the record that the merged area is underlain by a single stratigraphic trap.

In response to Hoffman's argument that BLM has merged three KGS's without regard to intervening dry holes, BLM points out that of the 15 sections identified by appellant as containing dry holes only 2 are involved in the present KGS merger. Wells located on these two sections 7/ were "drilled and abandoned," BLM acknowledges, but each well "reported oil and/ or gas shows" and were located on a productive fault block (BLM Answer, Nov. 8, 1985, at 3). Oil or gas shows are properly considered in determining a KGS. Beard Oil Co., 99 IBLA 40 (1987); Jack J. Bender, 54 IBLA 375 (1981), rev'd on other grounds, 744 F.2d 1424 (10th Cir. 1984); BLM Instruction Memorandum No. 84-35 (Oct. 14, 1983). Appellant fails to demonstrate error in BLM's decision by the mere identification of dry holes in acreage designated KGS. Carolyn J. McCutchin, 99 IBLA 29 (1987).

In the Arkla litigation cited by appellant, BLM's procedure of clear-listing lands for oil and gas leasing was found to be arbitrary because, inter alia, it failed to consider relevant geologic data and relied on a mechanical step-out system. As appellant correctly notes, the Court of Appeals for the Eighth Circuit found that the Department's definition of

5/ Draft of geologic report, July 5, 1983, Exhibit 9, BLM case record.
6/ Mineral report, Jan. 10, 1985, Exhibit 1, BLM case record.
7/ Secs. 13 and 23, T. 22 N., R. 6 W.

"KGS," which has been repeatedly construed to include stratigraphic traps, as here, did not comport with the intent of Congress in enacting the Mineral Leasing Act of 1920. "The legislative history of the Act," the Court held, "shows that oil industry spokespersons represented and Congress understood that, for purposes of the [Mineral Leasing Act], the term KGS, though a broad term, basically meant domes and anticlines which contained producing wells." 734 F.2d at 359 n.16. In support of this conclusion, the Court set forth a number of sources, 8/ including many relied upon by the District Court.

Of these sources cited by the Court, the testimony of Max W. Ball, a former chairman of the Oil Board, Geological Survey, and the author of the term "KGS," focuses most clearly on the scope of this term. The District Court summarized Ball's testimony in finding No. 115:

> 115. Mr. Max W. Ball testified in the [Hearings Before the House Committee on the Public Lands on H.R. 3232 and S. 2812, 65th Cong., 2d Sess. (1918)] that "geologic structure" was equivalent to "domes and anticlines":
>
> > I would say either substitute the Senate wording which is geologic structure, or the wording suggested by Mr. Hares in the letter read yesterday ("domes and anticlines").

562 F. Supp. at 1224.

[1] A careful reading of Ball's testimony and Hares' letter reveals that the term "geologic structure" may be permitted a broader reading than that given by the Arkla courts:

> Mr. BALL. Yes. I would strike out the words "ten miles from any producing oil or gas well" and would substitute either the Senate amendment on that point --
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> The CHAIRMAN (interposing). What is that? What would you put in there is substance?
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> Mr. TAYLOR. You mean geologic structure?
>
> Mr. BALL. Yes, sir.
>
> Mr. TAYLOR. You think geologic structure is sufficiently definite?

8/ The Court of Appeals cited 56 Cong. Rec. 657 (Jan. 7, 1918) and Hearings Before the House Committee on the Public Lands on H.R. 3232 and S. 2812, 65th Cong., 2d Sess. at 131-32, 238-40, 253 (1918), in support of this proposition. 734 F.2d at 359 n.16. The District Court found the Hearings Before the Senate Committee on Public Lands on H.R. 406, 64th Cong., 1st Sess. (1916) to further support this proposition.

> Mr. BALL. I would say either substitute the Senate wording, which is geologic structure, or the wording suggested by Mr. Hares in the letter read yesterday.
>
> Mr. TAYLOR. Domes or anticlines?
>
> Mr. BALL. Yes; something of that sort. [Emphasis added.]

Hearings Before the House Committee on the Public Lands on H.R. 3232 and S. 2812, 65th Cong., 2d Sess. 238-39 (1918). The wording suggested by Mr. Hares appears at page 183:

> The CHAIRMAN. I will read this short statement which is contained in a letter form Mr. C. J. Hares, geologist, dated Casper, Wyo., January 31, 1918, and addressed to Mr. Frank G. Curtis, chairman executive committee of Wyoming Chapter of the American Mining Congress, at Casper, Wyo.:
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> > I make the suggestion that the phrase "geologic structure" in the proposed alterations of the leasing bill now before Congress be changed to anticlines or other folds or conditions favorable for the accumulation of oil or gas." This is made for clearness and directness of meaning. In the interpretation of the phrase "geologic structure" disagreement will arise, and possibly confusion. Structural geology deals with many distortions and fractures of the earth that have nothing to do with oil and gas. For instance, geologic structure applies to schistosity in metamorphic rocks, to joints in granite, to unconformities, to faults, to volcanic plugs, etc.
> >
> > Of course, structure to many means a dome or anticline, especially to the oil men, who deal only with sedimentary rocks (bedded sands, shales, limestones, and the like), but to a host of geologists and miners the igneous and metamorphic rocks are most important; hence confine ourselves to our own problem. [Emphasis supplied.]

The materials quoted above demonstrate that neither Ball nor Hares sought to limit the term "geologic structure" to domes or anticlines. These materials establish, rather, that while domes and anticlines would be included within the term "geologic structure," they were not intended by Ball and Hares to determine its scope.

Other sources 9/ cited by the Arkla courts reveal a Congressional concern over whether a mileage standard (10 miles from a producing well) or a

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9/ See, e.g., 56 Cong. Rec. 657 (Jan. 7, 1918); 56 Cong. Rec. 7052 (May 24, 1918); and the testimony of B. F. Rice at p. 131 of Hearings Before the House Committee on the Public Lands on H.R. 3232 and S. 2812, 65th Cong., 2d Sess. (1918).

geologic standard (geologic structure) should be used to determine the size of a lease. Thus, Congress' decision in 1920 to reject a mileage standard was relevant to the KGS procedures criticized by the Arkla courts, which procedures limited BLM's expansion of a KGS to those sections adjacent to a new producing well. 562 F. Supp. at 1222. The Arkla courts correctly perceived a Congressional preference for a geologic standard, but have, we believe, unnecessarily limited this standard to include only domes and anticlines. The Department's KGS definition recognizes, as does the oil and gas industry, that hydrocarbons accumulate also in stratigraphic traps. Inclusion of such traps within the meaning of a KGS is, we believe, wholly compatible with Congressional intent, case law, and industry practice. 10/

We have set forth at some length our views of the Arkla decision to fully address Hoffman's argument on appeal. We have done so even though, as counsel for BLM correctly observes, "the Arkla decision, as the law of the Eighth Circuit, is not controlling in Louisiana," the situs of the lands at issue (BLM Answer at 4). Had venue been appropriate in a court of the Eighth Circuit, see 28 U.S.C. § 1391 (1982), the principle of nonmutual collateral estoppel would nevertheless permit this Board to hold a view contrary to the

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10/ See also Instruction Memorandum No. 86-433, dated May 6, 1986. The memorandum accompanied a report prepared for BLM by the National Academy of Sciences, entitled "Known Geologic Structures Under the Mineral Leasing Act: Interpreting and Applying the Term 'Known Geologic Structure of a Producing Oil and Gas Field.'" At page 16, the report states: "A 1920 USGS memorandum concerning how to define KGS affirmed that Congress left it to the Secretary of the Interior to determine the geologic structure, 'independent of the general definition of structure,' based on principles developed in the course of the Survey's experience." This conclusion in consistent with explanatory remarks offered to the House of Representatives by House Committee Members in 1919 concerning the establishment of boundary lines for oil and gas fields, in particular by Congressman Sinnott, who stated, in an exchange with Congressman Raker:

"We are using the phrase the 'known geologic structure of a producing oil or gas field,' and it may be possible that the courts would hold there is no such term. A law was passed at one time by Congress providing that certain things should be done in 'mineral districts.' The courts held that the term 'a mineral district' was an uncertain, unknown term, and that the law, therefore, had no application; and if anything like that is hinted at in respect to this phrase, we want to make it sure that the Secretary has the right to say where the oil structure of the producing field is. I think he has the right now under the act, but it is in order to make assurance doubly sure.

"Mr. RAKER. The testimony before the committee was that these geologic structures are fairly well defined, and can be found only by virtue of personal ascertainment upon the ground.

"Mr. SINNOTT. Yes; that was the burden of the testimony, although some of the experts suggested that it was a very loose, ambiguous term, and if you give the Secretary the right to define these structures and fields, it will take away all uncertainty and ambiguity'." 58 Cong. Rec. H7645 (daily ed. Oct. 28, 1919) (Emphasis supplied.)

Arkla decision until a binding precedent was established. (See Pacific Corp., 95 IBLA 16, 18 (1987), for a discussion of nonmutual collateral estoppel.)

Appellant's final argument is based on a misconception that she "won" a lease when BLM selected her lease application with first priority in 1982. BLM's selection established appellant's priority of filing, but did not otherwise create any vested rights to the lease in appellant. Guy W. Franson, 30 IBLA 123, 125 (1977). When, during the pendency of appellant's offer, lands described by such offer were determined to be within a KGS, BLM did not "change the rules" by denying lease ES 31984 to appellant. Indeed, regulation 43 CFR 3110.3 forbade issuance of this lease. That regulation states:

> If, prior to the time a noncompetitive lease is issued, all or part of the lands in the offer are found to be within a known geological structure of a producing oil or gas field * * * the offer shall be rejected in whole or in part as to such lands, as appropriate.

The Department has no discretion to issue a noncompetitive oil and gas lease for KGS lands. Rocky Mountain Exploration Co. v. U.S. Department of the Interior, No. 85-2560 (10th Cir. Oct. 26, 1987); McDonald v. Clark, 771 F.2d 460, 46/4 (10th Cir. 1985); McDade v. Morton, 353 F. Supp. 1006, 1010 (D.D.C. 1973), aff'd, 494 F.2d 1156 (D.C. Cir. 1974).

An applicant for a noncompetitive oil and gas lease who challenges a determination by BLM that land is within the KGS of a producing oil or gas field has the burden of showing by a preponderance of the evidence that the determination is in error. Bender v. Clark, 744 F.2d 1424 (10th Cir. 1984). Our review of appellant's statement of reasons convinces us that appellant has not made the requisite showing.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision of the Eastern States Office is affirmed.

Franklin D. Arness
Administrative Judge

We concur:

James L. Burski
Administrative Judge

John H. Kelly
Administrative Judge.